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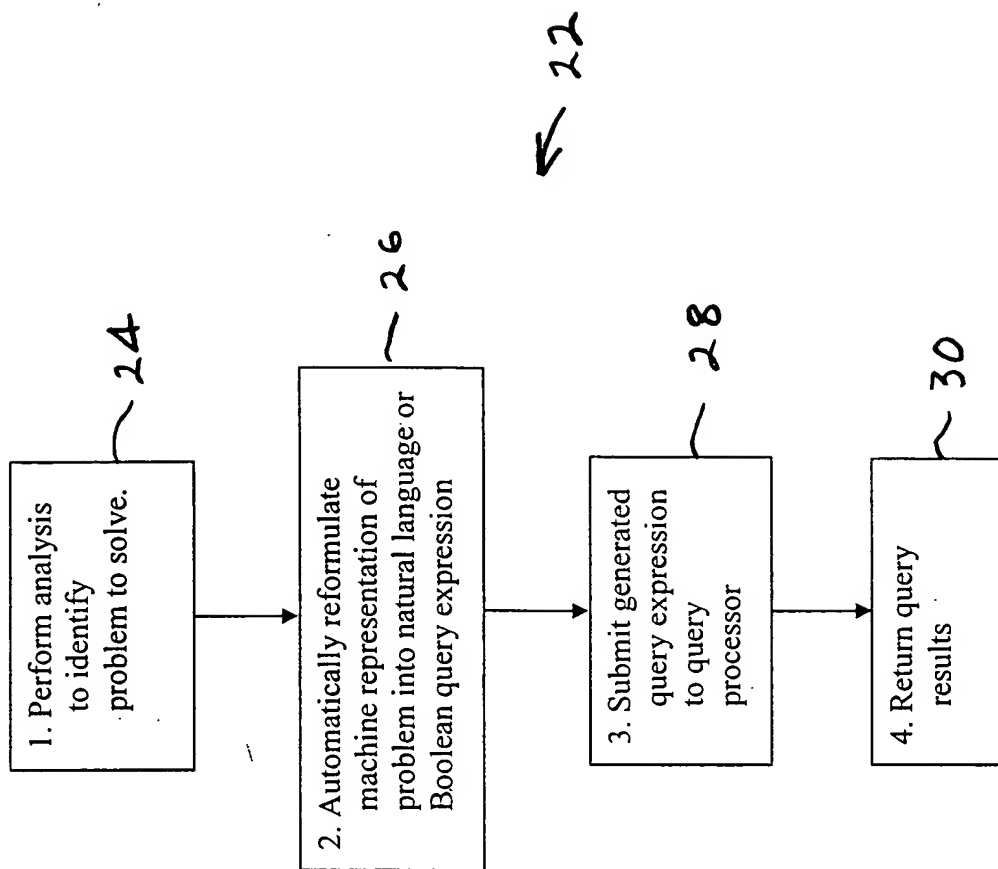


Fig. 6. Flow diagram of a system in accordance with the principles of this invention

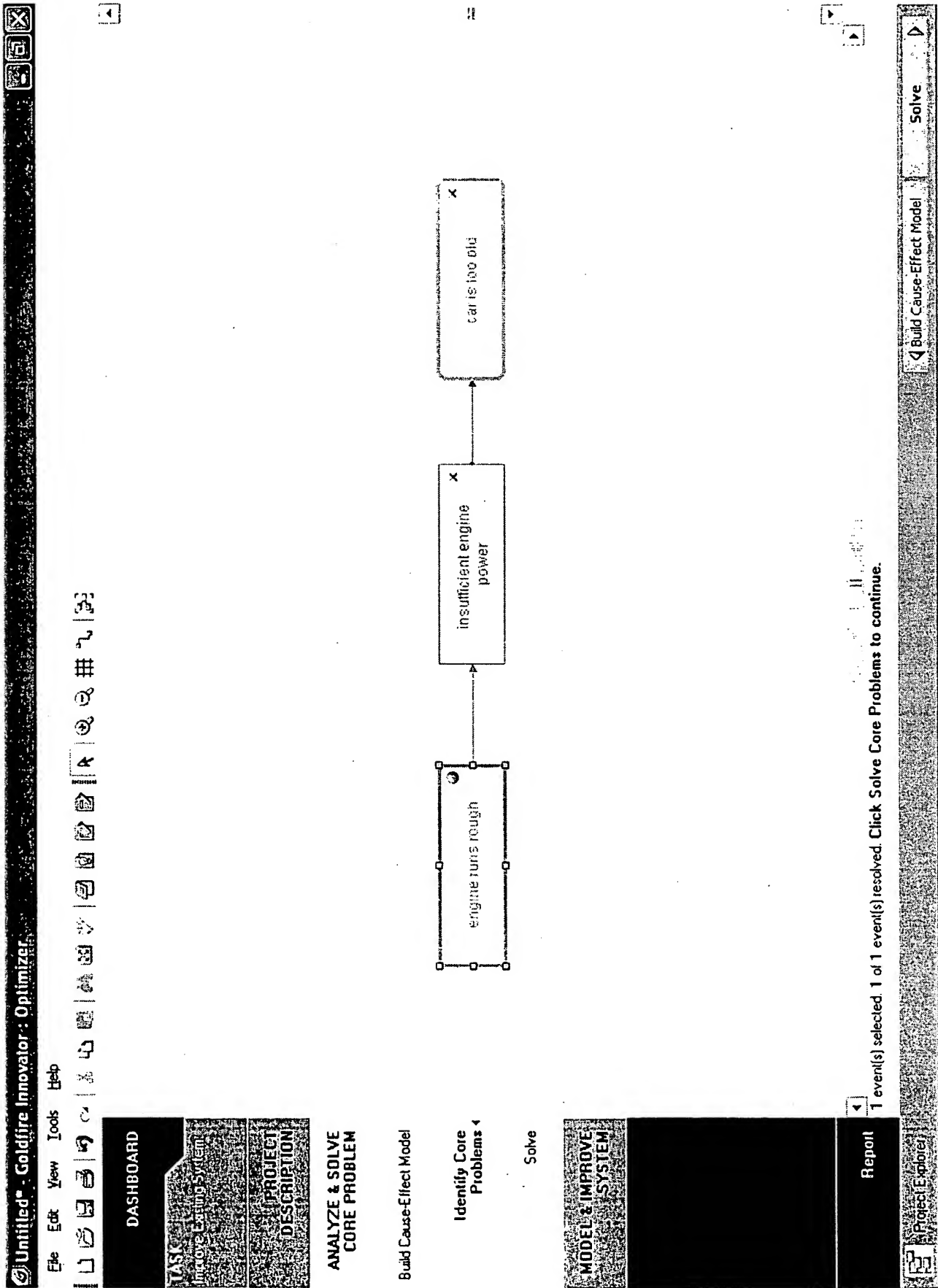


Figure 7 Illustrative screen showing problem analysis tool supporting root cause analysis

Soap dispenser - IP driven project* - Goldfire Innovator : Optimizer

File Edit View Tools Help

DASHBOARD

TASK
New Device Analysis

PROJECT DESCRIPTION

SEARCHING KNOWLEDGE BASE

MODEL & IMPROVE SYSTEM

Build Device Model

Simplify Design

Solve

Report

Problems & Solutions:

Design Scenarios: Trimmed scrubbing material design

Simplify design

Reassign the function "scrub hand"

New solution

User-defined Problems

New problem

General Solutions

New solution

Rank Solutions...

Problem description:

scrubbing material

scrub

hand

liquid soap

scrub

The function scrub hand is reassigned to the liquid soap.
How to perform the function scrub hand by the element liquid soap?

Solutions:

Knowledge Search

Effects

Principles

Patterns

User-defined

Query: How to scrub the hand

Stop Refresh

Corporate Knowledge

Patent Collections

Scientific Effects

Searching...

Searching...

Searching...

Save Solution(s)...

Simplify Design

Fig 8

Soap dispenser - IP driven project* - Goldfire Innovator : Optimizer

File Edit View Tools Help

DASHBOARD

TASK
New Device Analysis

PROJECT DESCRIPTION

SEARCHED KNOWLEDGE BASE

MODEL & IMPROVE SYSTEM

Build Device Model

Simplify Design

Solve

Report

Problems & Solutions:

Design Scenarios: Trimmed scrubbing material design

- Simplify design
 - Reassign the function "scrub hand"
 - New solution...
- User-defined Problems
 - New problem...
- General Solutions
 - New solution...

Rank Solutions...

Problem description:

```

graph LR
    A[scrubbing material] -- scrub --> C[hand]
    B[liquid soap] -- scrub --> C
  
```

The function scrub hand is reassigned to the liquid soap.
How to perform the function scrub hand by the element liquid soap? :

Solutions:

Knowledge Search Effects Principles Patterns User-defined

Query: How to scrub the hand

- Corporate Knowledge
- Patent Collections
- Scientific Effects

Stop Refresh

3 relevant results
0 relevant results
0 relevant results

Save Solution(s)...

Simplify Design

Fig 9

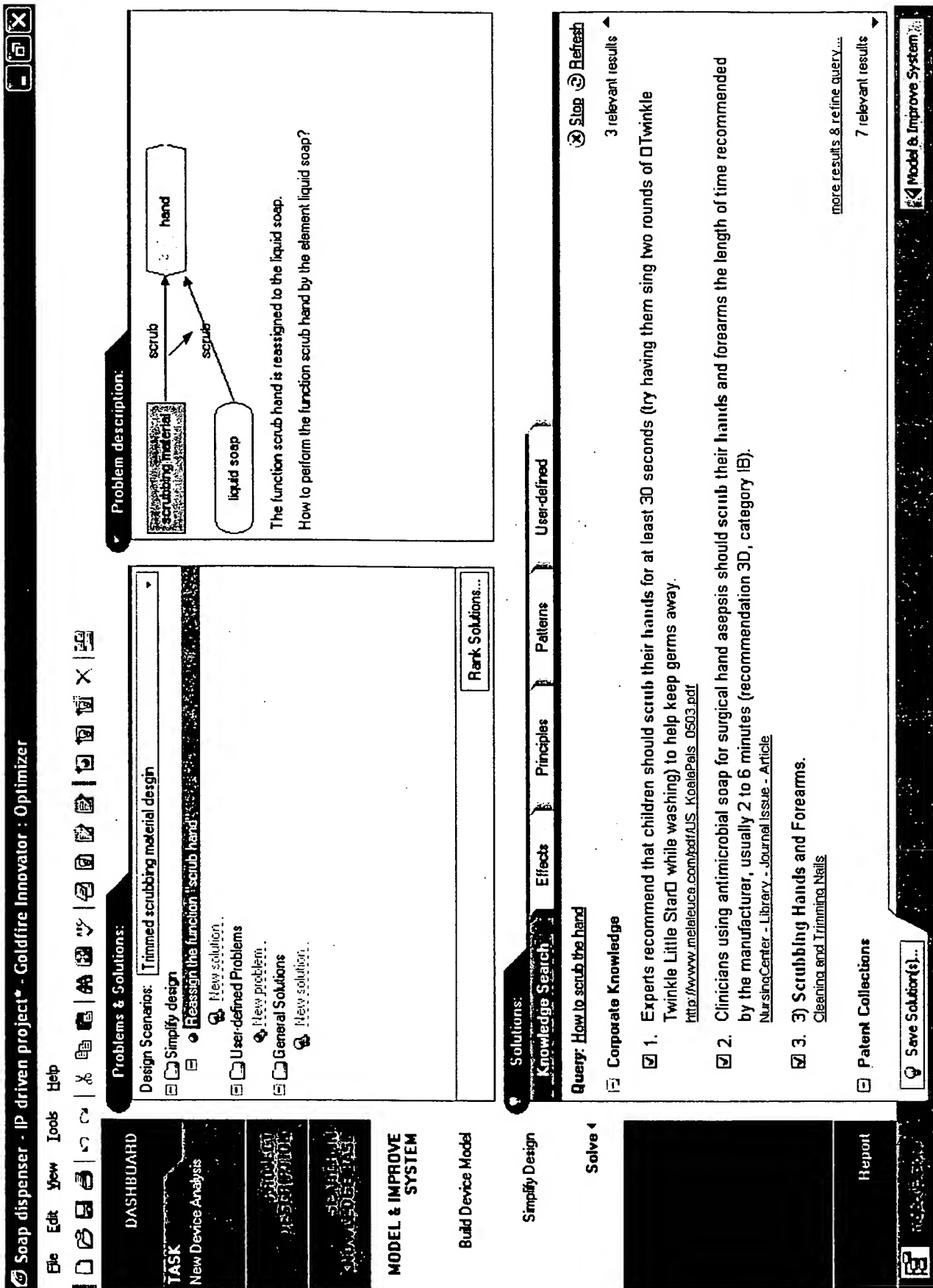


Fig. 4 Illustrative screen for a system in accordance with the principles of this invention